

THRASHER AWARDS: A Call for Nominations

The Thrasher Award is named in honor of Frederic Milton Thrasher, the 1927 author of the classic study of Chicago gangs, who generated the first social scientific analysis of gangs. Some say he started a new field of study: gangology.

Thrasher is known for his book *The Gang: 1,313 Gangs in Chicago*. Some copies of this book may be given away free of charge in one of the raffles at the 2017 Conference: in one of the "door prize drawings".

The Thrasher Awards recognize outstanding contributions in research, scholarship, service, leadership, and other related accomplishments in dealing with the gang problem.

If you know someone who has achieved something outstanding in this area, then please send your nominations to: The 2017 Thrasher Awards Committee, National Gang Crime Research Center, P.O. Box 990, Peotone, IL 60468.

The policy of the NGCRC is to provide complete and absolute identity protection to those who would want to nominate someone for a Thrasher Awards. The identity of a person or organization that would nominate someone for a Thrasher Award is therefore protected by this explicit written policy of the NGCRC. We will not reveal this information to recipients, it is considered confidential information. But by the same token, the NGCRC cannot accept "anonymous nominations".

As a general guideline, for "how to prepare" a nomination: one cover letter, and then whatever attachments you feel are necessary to support the nomination. Attachments can include: statements or letters from others, corroborating the nomination, newspaper coverage, any forms of documentation that can support the nomination.

Thrasher Awards will be made at NGCRC's 2018 Twenty First International Gang Specialist Training Program for persons who have made outstanding contributions in research, scholarship, service, leadership, and other accomplishments in dealing with the gang problem. These Awards cannot be made in absentia.

Thrasher Awards are made on-site during the Conference in a special ceremony. These awards cannot be made in absentia. Awards ceremony time and date (during the 2018 Conference in Chicago, 7:00 am Opening Ceremony for the Conference), scheduled for Monday, 7:00am, August 6, 2018. Recipients must be seated in the front row area. Arrive just before 7am and check in with the staff in front, tell them you are an Award Recipient.

Feel free to call the National Gang Crime Research Center if you have any additional questions: (708) 258-9111

"Offending Patterns of Youth Gang Members and Leavers"

by

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Abstract

Using data from the Pathways to Desistance Study, the self-reported offending of a sample of 175 adjudicated youth gang members, with a mean age of 16.02 years at the baseline, were investigated over a period of seven years. A new variable of gang member or leaver was created for each of the ten waves of data after the baseline, and a series of independent samples t-tests were undertaken to investigate self-reported offending frequencies. Gang members reported significantly higher scores for 15 out of 220 offense reports, and 2 out of 10 reports for exposure to violence. Gang leavers scored significantly higher than gang members for 3 out of 220 offense reports; 2 for violent offense categories. All effect sizes for significant tests were found to be very small, suggesting that leaving a gang does not automatically lead to offending desistance.

Youth gangs present a challenge for researchers for two key reasons: Firstly, because they are heterogeneous groups (Bullock & Tilley, 2008; Goldman et al., 2014; Klein & Maxson, 2014; Weerman et al., 2009); and secondly because individuals experience different levels of contact, attachment, and involvement, which are liable to change over time (Sweeten, Pyrooz, & Piquero, 2013). Studies that have taken account of these factors have found variations have found that the types of offenses that gang members commit, and even within offenses, depending on the organisation, amount of contact, and position within the group (Decker, 2001; Dmetrieva et al., 2014).

Not surprisingly, researchers have failed to reach a consensus on how to define a youth gang (Goldman et al., 2014; Klein & Maxson, 2006). Because of this, many gang studies have drawn their samples from school children to identify those who might belong to a gang through social and criminal history questionnaires (Alleyne & Wood, 2010; Pyrooz, Decker, & Webb, 2010). This is partly because self-identification has been characterised as problematic within gang research; with some researchers suggesting that people who claim to be members are not in fact (Battin et al., 1998; Bjerregaard, 2002). However, researchers have found that self-identification is reliable when compared to official records (Boxer et al., 2015).

Self-identification has the potential to provide a wider view of how young people define and describe the gang to which they belong, rather than imposing a definition upon them (Boxer et al., 2015). It also enables researchers to investigate the relationship between an individual's perceived group membership and their self-reported offending. The theoretical frameworks that have been adopted to study gangs have been dominated by sociological approaches, concentrating on the environmental and social factors that seek to explain why a young person joins a youth gang in the first place, and the role of the group in determining the action of the individual (Wood & Alleyne, 2010; Wood & Giles, 2014). Comparatively little research has been concerned with leaving the gang, its impact on an individual's delinquency and offending behaviors (Decker & Lauritsen, 2002; Pyrooz & Decker, 2011).

The relationship between gang membership and offending behaviors

Studies on the offending behaviors of youth gangs have consistently reported a disproportionate involvement in criminal and delinquent behavior by members (Curry et al., 2014; Esbensen & Huizinga, 1993; Spergel 1990; Thornberry et al., 2003). Research that has compared the illegal activities of gang members with youth who have delinquent peers has demonstrated that gang membership contributed to delinquency above and beyond peer association (Battin et al., 1998). These findings comprise a wide range of different types of crime, including: violent delinquency (Bendixen et al., 2006; Bjerk, 2009; Lacourse et al., 2003; Tita & Ridgeway, 2007); drug selling and using (Battin et al., 1998; Bjerregaard, 2010; Gatti et al., 2005; Zhang, Welte, & Wieczorek, 1999); and homicide (Bjerregaard & Lizotte, 1995; Melde & Esbensen, 2011).

Research has found that youth gangs are not homogenous groups (Klein & Maxson, 2006; Pyrooz & Decker, 2013) and as such gang membership does not necessarily increase a person's involvement with all categories of crime (Barnes, Beaver, & Miller, 2010; Tita & Ridgeway, 2007). This has led some researchers to conclude that it is the types of crimes that gang members are involved in that distinguish them from other youth who offend (Thornberry et al., 2003). In other words, gang members commit more crimes and are more liable to become victims of crime (Decker & Pyrooz, 2010), including homicide (Decker & Curry, 2002).

However, findings are often inconsistent. Some researchers have found that gang members often have the same recreational and illegal activities as non-gang youth, but that the offending rates of gang members were much higher (Fagan, 1989; Huff, 1996). In contrast, the Denver Youth Study data showed a significant difference between gang and non-gang offending youth in only one of eighteen offense variables (Esbensen & Huizinga, 1993). When research has been undertaken on non-drug related acquisitive crimes, some studies have found increased offenses against property among gang members (Gordon, Lahey, & Kawai, 2004; Klein & Maxson, 2006; Tita & Ridgeway 2007). Other researchers have shown that this was not the case for their sample (Bjerk, 2009). The same inconsistencies have been found regarding gangs and drugs.

Research findings and reports generally conclude that drugs are a strong part of gang culture and that a high percentage of drug sales can be linked to gangs (Esbensen et al., 2002; Howell et al., 2011). However, youth gang-related drug activities are often local and on a small scale because members do not have the necessary levels of organization or skills for larger scale operations such as drug

trafficking (Esbensen et al., 2002; Klein, 1995). The sale and use of drugs, like any other aspect of gang offending, do not follow a single pattern. A study of Kansas youth gang members showed that drug sale profits were not collectively shared with the gang (Decker & Van Winkle, 1996). In contrast, other research, in the late 1980s, revealed that there were youth gangs that existed primarily for the sale of drugs (Fagan, 1989). It is possible that belonging to a gang may equip an individual with the skills or connections that he or she may not have possessed before joining, but which can still be utilized for financial gain after leaving. Some studies have concluded that drugs and delinquency increased with gang membership and decreased when people left the gang (Battin-Pearson et al., 1998).

The relationship between drugs, gang membership and violence is a complex one (Bjerregaard, 2010; Zhang et al., 1999). Some studies have indicated that drug selling for their sample remained consistently high even when an individual had exited gang (Barnes et al., 2010; Bjerregaard & Lizotte, 1995; Gatti et al., 2005). A finding that is possibly explained by an individual having more flexibility and financial opportunities working outside of a restricted network. As noted, the degree to which an individual shares the proceeds of drug revenue differs between groups. Furthermore, research on the offending styles of embedded gang members has indicated that they offend alone (Goldweber et al., 2011).

Drugs have also been found to co-occur with exposure to violence and victimization (Decker & Van Winkle 1996; Esbensen et al., 2002; Hagedorn & Macon, 1998; Klein, Maxson, & Cunningham, 1991). Research indicates that exposure to violence decreases when an individual leaves the gang. The increase during membership has been explained by some researchers as part of a group process (Klein & Maxson, 2006). However, it is also worth noting that violent offenses can be a way of obtaining money, protecting oneself or showing status, rather than being violent for the sake of it (Decker & Van Winkle, 1996). A study using data from multi-site general school populations reported an increase of between ten and twenty-one percent in violent incidents among gang members, which decreased to a rate similar to non-gang youth when they left the gang (Melde & Esbensen, 2013). However, the same researchers also found that general offending remained elevated for former gang members.

Another sample, drawn from juvenile detention centers, demonstrated not only an increase in offending for gang members, but also in victimization and arrests (Decker, Melde, & Pyrooz, 2013). This has led some researchers to suggest that it is violence specifically that distinguishes gangs from other youth groups who are involved in delinquent behavior (Peterson, Taylor, & Esbensen, 2004). Awareness of this risk is demonstrated by the fact that escaping the violence is sometimes given as the reason for leaving a gang, indicating that there is an upper limit to tolerating violence for some individuals and in certain types of gang (Carson, Peterson, & Esbensen, 2013; Pyrooz & Decker, 2011).

The relationship between leaving the gang and desistance from crime

Researchers have consistently found that leaving a gang is typical (Bolden, 2012; Decker, 1996; Esbensen & Huizinga, 1993; Thornberry et al. 1993). This may be explained partly by looking at wider developmental issues relating to youth offending over the life course and criminal careers (Piquero, Farrington, & Blumstein, 2003; Pyrooz et al., 2010). Changes in attitudinal and psychological constructs that occur as an individual matures from late adolescence to early

adulthood have been found to occur (Sweeten, Piquero, & Steinberg, 2013). The age-crime curve demonstrates that as young people mature from adolescence into early adulthood their involvement with crime decreases (Farrington, 1986). Researchers have suggested that for juveniles to offend as part of a group is to be expected developmentally (Goldweber et al., 2011; Piquero et al., 2002). Aging out is only one of six possible pathways for leaving a gang that have been identified. Others include: dying, going to prison, getting a job, joining another organization, or leaving when a gang splits (Sanchez-Jankowski, 1991). Researchers (Decker & Lauritsen, 2002; Pyrooz et al., 2010) have found evidence to support gradual disengagement (Bushway, Thornberry & Krohn, 2003) and more immediate disassociation (Maruna & Roy, 2007).

Being a gang member, past or present, has been found to create a change in attitude, which then impacts on socially embedded controls that make delinquent behavior and criminal involvement acceptable to individuals. Such changes in constructs or behaviors do not necessarily occur when people leave (Melde & Esbensen, 2011). These findings are perhaps of little surprise when considering the practicalities of cutting off all ties from school peers, the neighbourhood, or indeed family members who may be involved in either gangs or non-gang delinquent and criminal behavior (Decker & Lauritsen, 2002; Pyrooz et al., 2010).

For members to leave and permanently desist, an emotional detachment and decrease in involvement with the gang is necessary (Decker & Lauritsen, 2002). There are also those who are transient members, who may find legitimate employment, but who are still involved in illegal and/or gang-related activities (Hagedorn, 1994). Studies have demonstrated that members with low levels of embeddedness leave the gang quickly, whereas high levels of embeddedness (the level of involvement and importance that an individual places upon the gang) increased membership by around two years (Sweeten, Pyrooz, & Piquero, 2013). Researchers found that disengagement from the gang could be associated with a decrease in offending, but did not predict future offending patterns; a finding that has serious consequences for the design of youth gang interventions, where the focus is often on leaving the gang (Braga, Hureau, & Papachristos, 2014; Esbensen et al., 2012; Howell, 2010; Spergel, Wa, & Sosa, 2014).

A key question that remains, therefore, is to what extent the experience of identifying with, and having been part of, a gang impacts upon an individual after they have left, and if this affects their subsequent involvement with delinquent behavior and offending patterns. Three models have been proposed to explain the relationship between gang membership and offending behaviors (Thornberry et al., 1993). The selection model postulates that already delinquent youth are attracted to gangs and that membership has no causal impact on their criminal behavior (Gibson et al., 2009). What this framework ignores is the potentially heightened opportunities that delinquent networks provide for an individual, or the potential of learning from those more practiced in criminal activities for a common goal or benefit (Klein & Maxson, 1996; Thornberry et al., 2003).

Research that has compared the illegal activities of gang members with youth who have delinquent peers has demonstrated that gang membership contributed to delinquency above and beyond peer association (Battin et al., 1998). The facilitation model takes account of the impact of the group (Melde & Esbensen, 2014) to posit that a gang offers more offending opportunities, and normalizes delinquent behavior as part of the group identity (Lacourse et al., 2003).

Finally, the enhancement model proposes that youth who are already delinquent are more likely to join a gang and then, once a member, their involvement enhances their violent (Barnes et al., 2010; Gordon et al., 2004) and anti-social behavior (Battin et al., 1998; Bjerk, 2009; Sweeten et al., 2013). Overall this model has levied the most support amongst youth gang researchers (Curry et al., 2014: 83-84, Table 5.1). However, findings vary in their support for the three models, depending on the type of crime, the level of embeddedness of gang members (Sweeten et al., 2013), and the methodologies that researchers employed (Ozer & Engel, 2012; Thornberry et al., 2003).

The present study

Using data from the Pathways to Desistance Study, the present study investigated whether the self-reported offending patterns of a sample of self-identifying youth gang members and leavers were significantly different over a 7-year period. The data permitted testing of the enhancement and facilitation models (Curry et al., 2014; Thornberry et al., 2003). Gang membership and offending frequencies were investigated for each wave of data to explore the relationship between self-reported gang affiliation and offending patterns at a point in time. The study was designed with a view to informing gang prevention programs, many of which are based on the facilitation premise that leaving the gang impacts directly on involvement with criminal and delinquent behavior (Battin-Pearson et al., 1998; Curry et al., 2014).

Methods

Sample

The Pathways to Desistance study was initiated between November 2000 and January 2003 with the aim of investigating the transition from adolescence to adulthood for young offenders who were drawn from courts in Maricopa County, Arizona or Philadelphia County, Pennsylvania. Criteria for involvement in the study stipulated that participants should be at least 14 years old and under 18 years of age when they reported committing their first offense; and that they must have been found guilty of a serious offense: 46% had been adjudicated for violent crimes, including murder, rape, robbery and assault; 27% of the sample had been adjudicated for property offenses, including arson, burglary and dealing with stolen goods; 10% of the sample had charges for carrying or using weapons; 13% for drug related crimes; and 4% for crimes such as conspiracy or intimidating witnesses (Dmitrieva et al. 2014). The proportion of young men who were included in the study was capped at 15% for drug offenses to avoid over-representation of this group; for the sampling and study design see Mulvey et al. (2004) and Schubert et al. (2004). The original dataset consisted of 1,345 young people between 14 to 17 years of age ($M = 16.5$) who were on average 14.9 years of age at the time of their first petition. The study sample consisted of 86% male participants and mainly non-White youth made up of 44% African American and 28% Hispanic.

For the purposes of the present study, participants who self-identified as gang members at the baseline interview were selected to create a new dataset of 175 youth who were then split into current gang members and leavers for all eleven waves of data. A decision to retain the 8% of female participants who met the criterion at the baseline was made in line with other gang related research, most notably Thornberry et al. (2003) who found that female gangs score highly on the same offenses as their male counterparts, but tend to leave the gang earlier.

The mean age of the sample of 175 gang members at the baseline was 16.02 years of age ($SD = 1.11$, range between 14 and 18 years). The sample consisted of 92% ($n = 161$) male and 8% ($n = 14$) female participants. The largest identified ethnic group was Hispanic (64.6%, $n = 113$), the second largest group were Black (21.1%, $n = 37$), followed by White 8.6%, $n = 15$, and 'other' 5.7%, $n = 10$). Of the sample 91.4% ($n = 160$) were born in the USA, and 8.6% ($n = 15$) were born overseas. The majority of self-identifying gang members at the baseline were located in Phoenix Arizona (81.7%, $n = 143$); 32 participants lived in Philadelphia. At the time of the baseline interviews 36% of the sample was in a community setting, and 63.5% were held in a secure setting or detained.

Measures

Gangs- The measure was an adaptation of the questions used by Thornberry et al. (1994). It was designed to explore two key aspects: subjective experience (position within the gang, the importance of the gang); and cohesiveness (colors and rules). The sample for the present study met the criterion of being a gang member 6 months prior to the baseline interview as opposed to having ever been in a gang. For subsequent waves the sample was asked if they were still in the same gang or had joined a new gang (Table 1).

Self-reported offending (SRO)- The SRO measure (Huizinga et al. 1991) was adapted by the Pathways to Desistance researchers to record antisocial and criminal behavior; two additional items were added after the initial baseline interview: joyriding and broke into a car to steal. The SRO consisted of 24-item questionnaire for offending behavior (Table 2). Two items were masked for confidentiality: killed someone and forced someone to have sex. These two additional items were excluded from the total count of offenses, because of missing data.

Exposure to violence- The Exposure to Violence inventory (Selner-O'Hagen et al., 1998) was modified for the study to investigate the number of times participants had either experienced violence or witnessed violence. For the purposes of the present research a combined score of victim and witness scales was used, which included seven witness items and six victim items.

Drug use- A modified version of a substance abuse measure that was used for the children of alcoholics (Chassin et al., 1991) was used for the study. The number of times that participants had taken illegal drugs was investigated for the present research.

Analysis

Frequencies of gang features at the baseline interview were investigated, to obtain a clearer understanding of the characteristics of the gangs and their level of organization. Attitudes to the gang and the amount of contact were also examined. The frequencies of delinquency before the age of eleven was assessed to provide some indication of pre-gang behavior. Descriptive statistics for self-reported offending, drug use, and victimization at the baseline were also completed, to create a point of comparison for scores from the subsequent inferential statistical analysis. Current gang members and those who were no longer in a gang were identified for the 10 subsequent waves of data. An independent between samples t -test was then run for all offending behaviors, drug use, and exposure to violence.

Table 1 Importance, friends, and frequency of contact with the gang Baseline to month 24

Variable	BL N	%	6m N	%	12m N	%	18m N	%	24m N	%
Importance of gang										
Not at all	30	17.1	21	18.1	24	24.7	19	23.8	15	21.7
A little bit	32	18.2	31	26.7	27	27.8	19	23.8	19	27.5
Moderately	27	15.4	15	12.9	17	17.5	16	20	13	18.8
Quite a bit	47	26.9	31	26.7	17	17.5	14	17.5	11	15.9
Extremely	39	22.3	18	15.5	12	12.4	12	15	11	15.9
Don't know	-	-	-	-	-	-	-	-	-	-
Friends NOT in gang										
None (all are members)	25	14.3	27	23.3	16	16.7	11	13.8	9	13.2
A few are not members	102	58.3	52	44.8	51	53.1	48	60	35	51.5
Half are not members	25	14.3	18	15.5	11	11.5	11	13.8	11	16.2
Most are not members	15	8.6	13	11.2	13	13.5	7	8.8	10	14.7
All (none are members)	8	4.6	6	5.2	5	5.2	3	3.8	3	4.4
Don't know	-	-	-	-	1	-	-	-	1	-
Contact with gang										
Daily	122	69.7	35	30.2	35	36.1	31	39.2	18	27.3
3-6 times per week	15	8.6	15	12.9	4	4.1	8	10.1	4	6.1
Twice per week	8	4.6	6	5.2	3	3.1	3	3.8	6	9.1
Once per week	3	1.7	13	11.2	13	13.4	8	10.1	8	12.1
more than monthly	5	2.9	3	2.6	4	4.1	4	5.1	3	4.5
Once per month	1	.6	11	9.5	10	10.3	8	10.1	6	9.1
Less than monthly	21	12	33	28.4	28	28.9	17	21.5	21	31.8
Don't know/refuse	-	-	-	-	-	-	1	-	3	-

RESULTS

Descriptive Statistics for Gang Features

Six months before the baseline interview the mean number of members in the gangs to which participants belonged was 318.62 ($SD = 865.20$, range between 5 and 9997). The mean of the age of the oldest members of the respective gangs was substantially higher than that of the participants: 35.84 years of age ($SD = 14.67$, with a range between 14 and 80 years old). At the baseline 73.7% ($n = 129$) of the 175-gang members belonged to a gang that had colors associated with its identity. Subsequent waves indicated that this continued to be the case throughout the study with either the majority of new gangs that were joined having colors associated with it. The only exception to this was found at 18 months when two of the new gangs had colors and two did not.

The existence of rules within the sample gangs was more evenly distributed. At the baseline 52.6% ($n = 92$) of the gangs had rules and 47.4% ($n = 83$) did not. In six of the subsequent waves the majority of new gangs had rules, however, the number of new gangs was relatively small when compared to the baseline. The sample was also asked if there were punishments for breaking rules in their associated gang. At the baseline 53.1% ($n = 93$ out of the 175 sample) stated that where relevant there were punishments involved in rule breaking, thus demonstrating further differences between gangs.

The sample was also asked if the gang shared drugs and money. At the baseline 73.1% ($n = 128$ out of the 175 sample) stated that the gang did share money. The only subsequent wave that did not follow this pattern was at 6 months, when the new members of the sample who joined a new gang both stated that it did not share money. At the baseline 82.9% ($n = 82.9\%$) of the sample stated that their gang shared drugs; throughout the waves sharing drugs continued score highest, except for 84 months when 60% ($n = 3$ out of 5) of those who joined a new gang stated that they did not share drugs with other members.

At the baseline 69.7% ($n = 122$) of the sample had daily contact with their gang; 8.6% ($n = 15$) saw other gang members 3 to 6 times weekly; 4.6% ($n = 8$) had contact twice per week; 1.7% ($n = 3$) once per week; 2.9% ($n = 5$) less than weekly but more than monthly; .6% ($n = 1$) once per month; and 12% ($n = 21$) less than once per month. This pattern changed considerably after the baseline interview, showing two polarized highest responses of 'daily contact' and 'less than monthly contact', and remained constant throughout the waves.

When asked how many of their friends were not in the gang, the highest percentage throughout the waves remained constant with the response 'a few are not members'. At the baseline 58% ($n = 102$) of the sample stated that this was the case. In terms of the next highest scores the sample was split between all their friends being gang members and half being gang members, with 14.3% ($n = 25$) for each.

The importance of the gang to the sample was more widely spread across a scale of five points, ranging from 'not at all' to 'extremely' (Table 1). At the baseline the highest percentage was 26.9% ($n = 47$) of the sample, who stated that the level of importance of the gang was 'quite a bit'; 22.3% ($n = 39$) stated that the gang was 'extremely' important; 18.2% ($n = 32$) said that the gang was a 'a little bit' important; 17.1% ($n = 30$) said that it was 'not at all' important; and 15.4% ($n = 27$) recorded that it was 'moderately' important to them. At 6 months the two highest scores were evenly split at 26.7% ($n = 31$) between 'a little bit' and 'quite a bit'. At 12 months

27.8% ($n = 27$) of the sample stated that the gang was 'a little bit' important and 24.7% ($n = 24$) said that it was not at all important. At 18 months participants repeated this pattern for the two highest scores with 23.8% ($n = 19$) stating that the gang was either only a little or not at all important to them. At 24 months 27.5% ($n = 19$) and 21.7% ($n = 15$) recorded that the gang was a little or not at all important, respectively; and at 30 months the number of people who stated that the gang was not important to them rose to 31% of the sample ($n = 19$), with 21.3% ($n = 13$) recording that it was 'a little bit' important, 19.7% ($n = 12$) stating that it was 'moderately' or 'quite a bit' in terms of its importance; the lowest percent (8.2%, $n = 5$) recorded that it was extremely important. The highest scores for the subsequent waves were consistently for the gang being not at all important and the lowest scores were for the gang being extremely important (Table 1). However, as the numbers of gang members over the waves decrease the disparity in the results becomes less obvious. So, in the final wave 10 people stated that the gang was 'not at all important', eight people recorded that it was 'moderately' important and three people each responded that that gang was 'a little', 'quite' and 'extremely important'.

Descriptive Statistics for Delinquency and Offending

A summary of offending behaviors for 12 months prior to the baseline is presented in Table 2. The mean frequency of offending for the sample for the year before the baseline interview was 260.89 ($SD = 463.25$, range between 0 and 2939). Just under half of these offenses were drug related ($M = 110.92$, $SD = 184.78$, range between 0 and 1324). The selling of drugs also had the highest mean scores out of all the offenses: selling marijuana scored 80.13 ($SD = 199.17$, range between 0 and 995) and the selling of other drugs had a mean score of 52 ($SD = 158.36$, range between 0 and 995). Carrying a gun also had a high mean score, of 46.49 ($SD = 96.64$, range between 0 and 365). However, using a gun scored much lower with a mean of 0.41 ($SD = 1.19$, range of 0 and 10) instances of participants having shot and hit someone, and a mean score of 1.23 ($SD = 2.79$, range between 0 and 20) for pulling the trigger of a gun.

After drug selling, entering a car to steal had the next highest mean score out of the income generating offenses ($M = 13.94$, $SD = 57.60$, range between 0 and 500). This was followed by receiving or selling stolen goods, which had the next highest mean ($M = 12.05$, $SD = 68.84$, range between 0 and 900). Shoplifting also scored relatively highly compared to other moneymaking activities with a mean of 9.54 ($SD = 32.66$, range between 0 and 305). Entering a building to steal had the lowest mean score in this group of 2.27 ($SD = 8.6$).

The mean score for robbery without a weapon was 4.26 ($SD = 26.80$, range of 0 and 350); this was higher than the robbery with a weapon, which had a mean score of 4.45 ($SD = 27.71$, range between 0 and 365). Carjacking had a comparatively low mean and maximum occurrence ($M = .40$, $SD = 1.51$, range between 0 and 15). The sample was more likely to steal a parked car ($M = 3.99$, $SD = 16.73$, range between 0 and 203). Joyriding had a much higher mean score than car theft ($M = 11.46$, $SD = 37.84$), and a higher range, between 0 and 305 times. Driving whilst under the influence of alcohol or drugs also scored relatively highly with a mean of 19.06 ($SD = 71.06$) and a range of between 0 and 600 times in the year.

Being in a fight had a higher mean and upper range ($M = 6.79$, $SD = 9.11$, range between 0 and 70) than gang fighting ($M = 4.16$, $SD = 8.37$, range between 0 and 60). Beating someone up so badly that they needed a doctor had the lowest mean

Table 2 Offending frequencies for gang members 12 months before the baseline interview

Offence	N	Mean	SD	SE	Min	Max
Used a credit card illegally	175	1.37	8.59	.65	0	100
Received stolen goods	175	12.05	68.84	5.20	0	900
Shoplifted	175	9.54	32.66	2.47	0	305
Entered a car to steal	79	13.94	57.60	6.48	0	500
Stole a car	175	3.99	16.73	1.27	0	203
Sold marijuana	173	80.13	199.17	15.14	0	995
Sold other drugs	174	52	158.36	12.01	0	995
Entered a property to steal	175	2.27	8.60	.65	0	100
Was paid for sex	175	.10	.59	35.02	0	5
Carried a gun	175	46.49	96.64	7.35	0	365
Carjacked	175	.40	1.51	.11	0	15
Shot someone	171	.41	1.19	.09	0	10
Shot at someone	175	1.23	2.79	.21	0	20
Robbery with a weapon	175	3.45	27.71	2.10	0	365
Robbery no weapon	175	4.26	26.80	2.03	0	350
Beaten someone up	172	1.09	1.76	.13	0	10
In a fight	175	6.79	9.11	.69	0	70
Destroyed property	174	13.4	67.23	5.10	0	800
Set fire to something	175	.49	2.01	.15	0	15
Gang fight	175	4.16	8.37	.63	0	60
Gone joyriding	90	11.46	37.84	3.99	0	305
Drove drunk/high	175	19.06	71.06	5.37	0	600

Table 3 Significant results for gang members scoring higher than leavers

Wave and variable	N	Mean gang	SD	N	Mean non-gang	SD	t-value	df	p
6 months									
cards illegally	116	.43	2.01	42	0	0	-2.31a	115	.02*
broke into car	116	3.54	14.11	42	.33	1.86	-2.39a	125.46	.02*
gang fight	115	1.28	2.76	42	.19	.59	-3.98a	138.60	0***
12 months									
fight	97	2.85	6.33	63	1.08	1.80	2.59a	118.55	.01**
gang fight	97	1.46	5.45	63	.11	.44	2.43a	97.96	.02*
victimization	97	1.95	2.30	63	1.19	1.58	2.47a	157.54	.01*
carried a gun	97	8.12	24.25	63	2.16	10.64	2.13a	142.02	.04
18 months									
stolen property	80	5.25	17.39	79	1.08	3.52	-2.10a	85.54	.05*
robbery weapon	80	.39	1.25	79	.04	.25	-2.46a	85.43	.02*
pulled trigger	80	.29	1.02	79	.04	.25	-2.15a	84.67	.04*
gang fight	80	.96	3.57	79	.13	.46	-2.08a	81.70	.04*
24 months									
gang fight	69	.28	.94	90	.08	.55	-2.08a	81.70	.04*
36 months									
stolen property	56	2.11	5.38	102	.59	2.02	-2.03a	63.64	.05*
other drugs	56	21.38	45.90	102	2.00	11.16	-3.11a	58.67	.003***
carried a gun	56	18.11	47.35	102	2.95	20.31	-2.28a	66.30	.03*
gang fight	56	.30	1.03	102	.01	.10	-2.14a	55.56	.04*
72 months									
victimization	34	1.76	2.09	128	1.05	1.71	2.05	160	.04*

Equal variances assumed (on basis of Levene's test for equality of variance).
 a Equal variances not assumed (on basis of Levene's test for equality of variance).
 Significance: * $p < .05$ ** $p < .01$ *** $p < .001$

and range of the three types of physical violence ($M = 1.09$, $SD = 1.76$, range between 0 and 10).

Of crimes against buildings, destroying property scored the highest with a mean of 13.4 ($SD = 67.23$) and the highest range, between 0 and 800. Setting fire to a house, building, car or vacant lot scored much lower ($M = .49$, $SD = 2.01$) with a low range between 0 and 15 times. The lowest mean score for all the baseline offenses was 'been paid for sex' ($M = .10$, $SD = .59$) and it also had the lowest range between 0 and 5 times in the year.

Although not part of the self-reported offending scale, participants were asked separately about drug use. At the baseline interview the mean use of drugs for the sample during their lifetime was 3.31 ($SD = 2.04$, range between 0 and 9). The mean score for drug use 6 months prior to the baseline interview was lower ($M = 1.86$, $SD = 2.04$, range between 0 and 9).

Inferential Statistics for Offending Behaviors and Exposure to Violence

The data consisted of a single categorical independent variable for the baseline of gang members, which was then split to create two conditions (current gang member and gang leaver); and a single continuous dependent variable (mean scores) for offending frequencies. An independent samples t -test was undertaken for each of the dependent variables across the 10 waves after the baseline. A Kolmogorov-Smirnov test revealed that the sample was not normally distributed; however, the sample size was large enough to assume normality of distribution. It was decided not to remove outliers from the data because of the nature of youth offending. Standard deviations are reported with the results.

Table 4 Significant results for gang leavers scoring higher than members

Wave and variable	N	Mean gang	SD	N	Mean non-gang	SD	t -value	df	p
6 months									
stolen property	69	1.52	3.79	90	3.61	15.75	-2.10a	85.54	.04*
24 months									
robbery weapon	69	.26	1.05	90	.46	3.20	-2.46a	85.43	.02*
pulled trigger	69	.07	.40	89	.17	1.30	-2.15a	84.67	.04*

Equal variances assumed (on basis of Levene's test for equality of variance).
a Equal variances not assumed (on basis of Levene's test for equality of variance).

Significance: * $p < .05$ ** $p < .01$ *** $p < .001$

Acquisitive crimes and behavior associated with generating income

Using credit cards illegally- There was a significant difference in the number of reports of using credit cards or checks illegally at 6 months. Only gang members reported committing this offense in this wave ($M = .43$, $SD = 2.01$); there were no instances of gang leavers using cards or checks illegally ($M = 0$, $SD = 0$), with the results of the test: $t = -.231$, $df = 115$, $p < .05$ (two-tailed). The magnitude of differences in the means (mean difference = $-.43$, 95% CI: $-.80$ to $-.06$) was very small (eta squared = $< .001$). There were no subsequent significant differences for the other waves of this offense. There are two instances when the mean scores were higher than the baseline score of 1.37 ($SD = 8.59$); this was for gang members at 24 and 60 months.

Broke into car to steal- There was a significant difference in the number times gang members and gang leavers reported breaking into a car to steal something, this was at 6 months. Gang members reported committing the crime more times ($M = 3.54$, $SD = 14.11$) than gang leavers ($M = .33$, $SD = 1.86$); ($t = -2.39$, $df = 125.46$, $p < .05$, two-tailed). The magnitude of differences in the means (mean difference = -3.21 , 95% CI: -5.86 to $-.56$) was very small (eta squared = $.04$). All mean scores were lower than the baseline score of 13.94 ($SD = 57.60$).

Bought/sold/received stolen property- There was a significant difference in the number of times that gang members and gang leavers reporting having bought, sold or received stolen goods, at 18, 24 and 36 months. At 18 months gang members reported committing the crime more times ($M = 5.25$, $SD = 17.39$) than gang leavers ($M = 1.08$, $SD = 3.52$); ($t = -2.10$, $df = 85.54$, $p < .05$, two-tailed). The magnitude of differences in the means (mean difference = -4.17 , 95% CI: -8.12 to $-.23$) was very small (eta squared = $.03$). At 36 months gang members once again reported committing the crime more times ($M = 2.11$, $SD = 5.38$) than gang leavers ($M = .59$, $SD = 2.02$); ($t = -2.03$, $df = 63.64$, $p = .05$, two-tailed). The magnitude of differences in the means (mean difference = 1.52 , 95% CI: $.03$ to 3.01) was very small (eta squared = $.03$). However, these findings were reversed at 24 months with gang members reporting having committed the crime fewer times ($M = 1.52$, $SD = 3.79$) than gang leavers ($M = 3.61$, $SD = 15.75$); ($t = 12.10$, $df = 85.54$, $p < .05$, two-tailed). The magnitude of differences in the means (mean difference = -4.174 , 95% CI: -8.12 to $-.23$) was very small (eta squared = $.03$). There were no other significant differences between groups in the other waves for this offense. Only the mean score for gang members at 6 months was higher than the baseline mean of 12.05 ($SD = 68.84$).

Sold illegal drugs other than marijuana- There was a significant difference in the number of times gang members and leavers reported selling illegal drugs other than marijuana at 36 months. Gang members sold more ($M = 21.38$, $SD = 45.90$) than gang leavers ($M = 2$, $SD = 11.16$); ($t = -3.11$, $df = 58.67$, $p < .01$, two-tailed). The magnitude of differences in the means (mean difference = 19.38 , 95% CI: 6.90 to 31.85) was very small (eta squared = $.06$). There were no other significant differences between groups in the other waves for this offense. The mean score for gang members at 18 months was 227.01 ($SD = 119.21$), this was the only wave that was higher than the baseline mean of 52 ($SD = 158.36$).

Robbery with a weapon- There was a significant difference in the number of times each group reported committing robbery with a weapon at 18 months and 24 months. At 18 months gang members reported committing more offenses ($M = .39$, $SD = 1.25$) than gang leavers ($M = .04$, $SD = .25$); ($t = -2.46$, $df = 85.43$, $p < .05$, two-

tailed). The magnitude of differences in the means (mean difference = -.35, 95% CI: -.63 to -.07) was very small (eta squared = .04). At 24 months gang members reported committing the offense fewer times ($M = .26$, $SD = 1.05$) than gang leavers ($M = .46$, $SD = 3.20$); ($t = -2.46$, $df = 85.43$, $p < .05$, two-tailed). The magnitude of differences in the means (mean difference = -.35, 95% CI: -.63 to -.07) was very small (eta squared = .04). There were other significant differences between groups in the other waves for this offense. All mean scores were lower than the baseline mean of 3.45 ($SD = 27.71$).

No significant differences in the mean scores for the two groups were found for: shoplifting, stole a car or motor cycle, broke into a car to steal, sold marijuana, robbery without a weapon, or paid [by someone] for sex. For all offenses, the mean score at the baseline interview was higher than any subsequent waves.

Non-acquisitive violent crimes and use of weapons

Carried a gun- There was a significant difference in the number of times each group carried a gun at 12 months and 36 months. At 12 months gang members carried a gun more times ($M = 8.12$, $SD = 24.25$) than gang leavers ($M = 2.16$, $SD = 10.64$); ($t = 2.13$, $df = 142$, $p < .05$, two-tailed). The magnitude of differences in the means (mean difference = 5.97, 95% CI: .42 to 11.51) was very small (eta squared = .03). At 36 months gang members also carried a gun more frequently ($M = 18.11$, $SD = 47.35$) than gang leavers ($M = 2.95$, $SD = 20.31$); ($t = -2.28$, $df = 66.30$, $p < .05$, two-tailed). The magnitude of differences in the means (mean difference = 15.16, 95% CI: 1.90 to 28.41) was very small (eta squared = .03). There were no other significant differences between groups in the other waves for this offense. The mean score at the baseline interview was higher than any of the subsequent scores.

Pulled the trigger of a gun and shot at someone (no hit)- There was also a significant difference in the number times each group shot at someone, but failed to hit them; this was found at 18 months and 24 months. At 18 months gang members pulled the trigger of a gun more times ($M = .29$, $SD = 1.02$) than gang leavers ($M = .04$, $SD = .25$); ($t = -2.15$, $df = 84.67$, $p < .05$, two-tailed). The magnitude of differences in the means (mean difference = -.250, 95% CI: -.48 to -.02) was very small (eta squared = .03). However, at 24 months the results were reversed with gang members pulling the trigger of a gun fewer times ($M = .07$, $SD = .40$) than gang leavers ($M = .17$, $SD = 1.30$); ($t = -2.15$, $df = 84.67$, $p < .05$, two-tailed). The magnitude of differences in the means (mean difference = -.25, 95% CI: -.48 to -.02) was very small (eta squared = .03). The mean score for the baseline interview (1.23, $SD = 2.79$) was higher than any of the subsequent waves.

Being involved in a fight- There was a significant difference in the number of times the two groups were in a fight at 12 months. Gang members were involved in more fights ($M = 2.85$, $SD = 6.33$) than gang leavers ($M = 1.08$, $SD = 1.80$); ($t = 2.59$, $df = 118.55$, $p = .01$, two-tailed). The magnitude of differences in the means (mean difference = 1.76, 95% CI: .42 to 3.12) was very small (eta squared = .04). The mean score for the baseline (6.79, $SD = 9.11$) was higher than any of the subsequent waves.

Gang fight - The offense for which there was the highest number of significant differences over the 10 waves was being involved in a gang fight. In 5 out of the 10 waves gang members were significantly involved in more gang fights than gang leavers. At 6 months the results were highly significant: gang members ($M = 1.28$, $SD = 2.76$) and gang leavers ($M = .19$, $SD = .59$); ($t = -3.98$, $df = 138.6$, $p < .001$,

two-tailed). The magnitude of differences in the means (mean difference = 1.09, 95% CI: -.163 to -.55) was very small (eta squared = .09). At 12 months the results were significant: gang members ($M = 1.46$, $SD = 5.45$) and gang leavers ($M = .11$, $SD = .44$); ($t = 2.43$, $df = 97.96$, $p < .05$, two-tailed). The magnitude of differences in the means (mean difference = 1.35, 95% CI: .25 to 2.46) was very small (eta squared = .04). At 18 months the results were significant: the mean for gang members had decreased from the previous wave ($M = .96$, $SD = 3.57$), but was still significantly higher than gang leavers ($M = .13$, $SD = .46$); ($t = -2.08$, $df = 81.70$, $p < .05$, two-tailed). The magnitude of differences in the means (mean difference = -.84, 95% CI: -1.64 to -.04) was very small (eta squared = .03). The same pattern emerged at 24 months: gang members were involved in fewer fights ($M = .28$, $SD = .94$) but still significantly more than gang leavers ($M = .08$, $SD = .55$); ($t = -2.08$, $df = 81.70$, $p < .05$, two-tailed). The magnitude of differences in the means (mean difference = -.84, 95% CI: -1.64 to -.04) was very small (eta squared = .03). A significant difference was also found at 36 months: gang members ($M = .30$, $SD = 1.03$) and gang leavers ($M = .01$, $SD = .10$); ($t = -2.14$, $df = 55.56$, $p < .05$, two-tailed). The magnitude of differences in the means (mean difference = .29, 95% CI: .02 to .57) was very small (eta squared = .03). No measure was taken at the baseline interview for comparison. This offense showed the highest number of significant differences between the two groups.

No significant differences in the mean scores were found for the two groups for either shooting at someone and hitting them, beating someone up so badly that they needed a doctor, or carjacking. Setting fire to a property, vacant lot, or building and destroying property are both also categorized as aggressive offenses in the measures; neither produced significant differences. The mean score at the baseline interview was higher than any of the subsequent waves for all offenses.

Delinquent behavior

No significant differences in the mean scores were found for the two groups for driving drunk/high or joyriding. The mean score at the baseline interview was higher for both offenses than any of the subsequent waves.

Drug use

No significant differences in the mean scores were found for the two groups for drug use. The mean score for drug use for the sample of 175 over their lifetimes was (3.31, $SD = 2.04$), and over the 6 months before the baseline interview the mean was 1.86 ($SD = 1.86$). All subsequent usage was lower. However, even though a general decrease was shown in the mean scores for both gang members and leavers, neither group showed a consistent decrease in drug use over time.

Exposure to violence

The mean score for victimization and witnessing the victimization of another person for the 175-gang members at the baseline was 7.38 ($SD = 2.61$, range between 0 and 13). Only two waves demonstrated a significant difference in the numbers of times that gang members and leavers were victims or witnessed the victimization of another person. In both cases gang members' scored higher. At 12 months gang members had a mean score of 1.95 ($SD = 2.30$) compared to gang leavers who had a mean score of 1.19 ($SD = 1.58$); ($t = 2.47$, $df = 157.54$, $p < .05$, two-tailed). The magnitude of differences in the means (mean difference = .76, 95% CI: .15 to 1.36)

was very small (eta squared = .04). At 72 months gang members had a mean score of 1.76 ($SD = 2.09$) compared to gang leavers who had a mean score of 1.05 ($SD = 1.71$); ($t = 2.05$, $df = 160$, $p < .05$, two-tailed). The magnitude of differences in the means (mean difference = .71, 95% CI: .03 to 1.40) was very small (eta squared = .03). The baseline mean score of 7.38 ($SD = 2.61$) was higher than any of the subsequent scores.

DISCUSSION

Gang membership

The present study aimed to investigate whether there were differences in the offending patterns of gang members and leavers. The sample was typical of other gang datasets in that it did not form a homogenous group (Klein and Maxson 2006, Pyrooz and Decker 2013). Differences were found in gang structures, and in respect to numbers and levels of organization. Individual differences were also found regarding the importance of the gang and level of contact. The amount of contact that members had with their respective gangs after the baseline, when 69.7% of the sample had contact daily, diminished over the subsequent waves of data. This finding may have changed the level of influence that the gang had on its members, which may in turn explain the low numbers of significant differences between gang members and leavers. This ties in with the age and desistance literature, which would predict that as the sample became older, they would need to rely on the group less (Piquero et al., 2002).

Offending patterns

The mean scores for gang members' reported crimes were significantly higher than gang leavers for 15 out of 220 cases (Table 3); however, all of the effect sizes were very small. Furthermore, gang leavers scored significantly higher than those who remained in a gang on 3 out of 220 occasions (Table 4); once again, the effect sizes were all found to be very small.

There were also no patterns of significant differences any of offense types across the 10 waves of data. The only exception to this observation was, perhaps not surprisingly, involvement in gang fights (Table 3), but only until 36 months. Fighting between gangs has been identified as one way of controlling areas, which is often associated with the sale of drugs (Bjerregaard, 2010).

Prior studies have found an association between violent crimes and gang membership (Melde & Esbensen, 2013; Peterson et al., 2004). In addition to gang fighting the present study found that gang members were involved in significantly more violent offenses on 5 occasions. However, gang leavers also scored significantly higher than gang members for 2 violent offenses: robbery with a weapon and pulling the trigger of a gun. These findings were not in accordance with previous studies, where violence has been identified as being higher for gang members (Peterson et al., 2004; Pyrooz et al., 2010; Thornberry et al., 2003).

Violence has also been associated with drug selling (Decker & Van Winkle, 1996; Esbensen et al., 2002; Klein et al., 1991). However, only once was there found to be a significant difference between gang members and leavers for the sale of illegal substances; this was at 36 months for the sale of drugs other than marijuana. Selling drugs was found to be among the highest offense frequencies for both groups, suggesting that this activity did not depend on gang membership. This

finding is in line with previous studies (Barnes et al., 2010; Bjerregaard & Lizotte, 1995; Bjerregaard, 2010; Gatti et al., 2005).

There is comparatively little attention in the academic literature to the relationship between gang membership and non-drug related acquisitive crimes. The present study found that gang members significantly used credit cards illegally more than leavers at 6 months, and had a significantly higher mean score for handling stolen property twice, at months 18 and 36. However, gang leavers also scored significantly higher for buying or selling stolen items at 6 months.

In addition to offending, it has been suggested that gang members witness and experience more violent victimization than the than non-gang youth (Decker & Curry, 2002; Decker et al., 2013; Esbensen et al., 2009; Thornberry et al., 2003). In the present study this was only found to be the case for gang members at 12 months and 72 months in the present dataset. There was no significant difference for any of the other waves of data. Gang members scored higher for all waves, except for 84 months when the leavers experienced more violence, but not significantly so. No pattern emerged from the present data to support the suggestion that leaving a gang significantly decreases exposure to violence, which contradicts previous studies (Decker et al., 2013; Pyrooz et al., 2010).

The low number of significantly higher scores for gang members, the lack of patterns within violent offense types, except for gang fighting, and the significantly higher scores for gang leavers that included violent offenses does not accord with previous findings in relation to the association of violent offenses specifically with gangs (Peterson et al., 2004; Pyrooz et al., 2010). In fact, the low number of significant differences across the data does not fully support the hypothesis that leaving a gang leads to desistance from crime, beyond the natural decrease that is typically found with an increase in age (Farrington, 2007). Support was found for a general decline in offending and delinquency from late adolescence (Farrington, 1986) for both groups. Out of the three models (Thornberry et al., 1993) only the enhancement model fits the data, and this cannot be tested fully because of the missing information regarding pre-gang offending.

A major limitation of the current dataset was the decision by the researchers to exclude the results for the questions relating to homicide and forcing someone to have sex. Previous research has found that serious violent attacks often distinguish gang members from non-gang youth. Gang membership and offending frequencies were also self-reported and unverified, which leaves potential for participants to exaggerate or under-report offending and gang affiliation. Although researchers (Pyrooz et al., 2013) have subsequently used variables to estimate levels of embeddedness in the gang, the gang measure did not include this as a specific variable in each wave. Like other longitudinal studies on serious juvenile offenders, the sample was drawn from the US. The extent to which the results can be applied to other cultures or countries remains untested.

The present study's findings have the potential to impact on the writing of interventions for gang affiliated youth, and in monitoring and supporting those who leave. The present study was restricted to an analysis of the offending patterns of gang members and leavers. Styles of co/group offending versus solo, are also relevant to the relationship between gang membership and offending patterns. Research has indicated that embedded gang members often offend alone (Goldweber et al., 2011), suggesting that the relationship between gang membership and offending may not simply be explained by opportunity and support. Future

research should consider how long-term attitudinal effects and learned behaviors of associating with a gang may impact on leavers (Scott, 2014). This would be in accordance with previous findings that suggest it is not always possible to reverse the socially embedded controls that are changed when an individual joins a gang (Melde & Esbensen, 2011).

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